

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

July 28, 2008

CERTIFIED MAIL 7004 1160 0003 0352 6699 RETURN RECEIPT REQUESTED

Mr. Paul Zawila ES&H Manager Solutia Inc. Chocolate Bayou Facility P.O. Box 711 Alvin, TX 77512-0711

Re: Final Injection Well No Migration Exemption Reissuance Decision for WDW-224 & WDW-326

Dear Mr. Zawila:

Effective the date of this letter, the Environmental Protection Agency (EPA) Region 6 approves the reissuance request for Solutia Inc.'s (Solutia) exemption to the land disposal restrictions for wells WDW-224 & WDW-326 at the Chocolate Bayou facility in Alvin, Texas.

The land disposal restrictions prohibit the injection of hazardous waste unless a petitioner can demonstrate to EPA, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the injection zone for as long as the wastes remain hazardous. The land disposal restrictions for injection wells, codified in 40 CFR Part 148, provide the standards and procedures by which petitions to dispose of an otherwise prohibited waste by injection will be reviewed, and by which exemptions based on these petitions will be granted or denied.

A letter dated June 2, 2008, from Region 6 informed Solutia that EPA was proposing to approve Solutia's petition reissuance request for an exemption to the land disposal restrictions. The public comment period associated with this decision began on June 5, 2008, and closed on July 21, 2008. No comments were received.

Based on a detailed review of the submitted petition and support documents, EPA has determined that this information for Solutia's WDW-224 & WDW-326 meets the requirements of 40 CFR Part 148 by demonstrating no migration of hazardous constituents from the injection zone for 10,000 years.

The following are conditions of this exemption to the land disposal restrictions:

Petition Reissuance Approval Conditions

This approval of the petition for reissuance of exemption to allow the continued injection of restricted hazardous wastes is subject to the following conditions, which are necessary to assure that the standard in 40 CFR §148.20(a) is met. The approval of the petition for reissuance of exemption conditions were revised to reflect the changes represented by this reissuance. Noncompliance with any of these conditions is grounds for termination of the exemption in accordance with 40 CFR §148.24(a)(1). This reissued exemption is applicable to the existing injection wells, WDW-224 and WDW-326, located at the Solutia Chocolate Bayou Facility in Alvin, Texas.

1. Injection of restricted waste shall be limited to the following injection zone:

Well	Depth of Injection Zone
WDW-224	3215' - 7580' KB 5/25/83, 6/1/83, and 6/9/83 Induction
	Velocity Log
WDW-326	3135' - 7500' KB 9/16/96 Array Induction Imager
	LDT/CNL with Gamma Ray/Caliper Log

The injection interval shall be defined by the following correlative log depths:

Well Injection Interval Depth of Injection Interval

WDW-224 Sands 7 and 8 5848' - 6174' KB

(Depths referenced to WDW-224 5/25/83, 6/1/83, and 6/9/83 Induction Velocity Log)

WDW-326 Sands 7 and 8 5788' - 6112' KB

(Depths referenced to WDW-326 9/16/96 Array Induction Imager LDT/CNL with Gamma Ray/Caliper Log)

- 2. For WDW-224 and WDW-326 combined, the cumulative monthly volume injected into each sand (Sand 7 or Sand 8) during any given month shall not exceed that calculated by multiplying 270 gpm x 1440 minutes/day x the number of days in that month. If the combined monthly rate for both wells exceeds 270 gpm, Solutia must submit annual verification that the cumulative monthly flow into Sand 7 or Sand 8 does not exceed 270 gpm, or Solutia must isolate a different sand in each well (WDW-224 and WDW-326).
- 3. The facility shall cease injection into WDW-224 and WDW-326 on December 31, 2026.
- 4. The characteristics of the injected waste stream shall for WDW-224 and WDW-326 at all times conform to those discussed in Section 3.5 of the 2005 Petition Reissuance document for WDW-224 and WDW-326. The density of the wastestream for WDW-224 and WDW-326 shall remain within a range from 1.14 to 1.57 g/cm³ at 68°F and 1 atmosphere or within an equivalent specific gravity range of 1.14 to 1.57 at 68°F and 1 atmosphere with a reference temperature of 68°F.

5. The approval for injection is limited to the following hazardous wastes: D002, D003, D004, D005, D007, D008, D010, D011, D018, D019, D038

F001, F002, F003, F005, F006, F019, F024, F025, F034, F035, F037, F038, F039 (for the constituents listed in Table 3.5.1-I in the 2005 Petition Reissuance)

K009, K010, K011, K013, K014, K026, K031, K083, K085, K087, K103, K104, K105

P003, P016, P030, P031, P056, P063, P069, P098, P101, P105, P106

U001, U002, U003, U004, U005, U007, U008, U009, U012, U019, U046, U053, U056, U080, U122, U123, U124, U134, U135, U147, U152, U154, U161, U165, U188, U196, U197, U211, U220, U226, U239

- 6. The facility must petition for approval to inject additional hazardous wastes which are not included in Condition No. 5, above. The facility must also petition for approval to increase the concentration of any waste which would necessitate the recalculation of the limiting concentration reduction factor and the extent of the waste plume. Petition reissuances and modifications should be made pursuant to §148.20 (e) or (f).
- 7. Solutia shall annually submit to EPA the results of a bottom hole pressure survey for WDW-224 and WDW-326. This survey shall be performed after shutting in the well for a period of time sufficient to allow the pressure in the injection interval to reach equilibrium, in accordance with §146.68(e)(1). The annual report should include a comparison of reservoir parameters determined from the falloff test with parameters used in the approved no migration petition reissuance.
- 8. Upon the expiration, cancellation, reissuance, or modification of the Texas Commission on Environmental Quality's Underground Injection Control permit for Well Nos. WDW-224 and WDW-326, this exemption is subject to review. A new demonstration may be required if information shows that the basis for granting the exemption is no longer valid under 40 CFR §148.23 and §148.24.

In addition to the above conditions, this final approval of the petition for reissuance of exemption is contingent on the validity of the information submitted in the Solutia reissuance request for an exemption to the land disposal restrictions. This final reissuance decision is subject to termination when any of the conditions occur which are listed in 40 CFR §148.24, including noncompliance, misrepresentation of relevant facts, or a determination that new information shows that the basis for approval is no longer valid.

If you have any questions or comments, please call Philip Dellinger at (214) 665-7150.

Sincerely yours,

Miguel I. Flores

Division Director

Water Quality Protection Division

cc: Robert Smith, USEPA OGWDW

Ben Knape, TCEQ

Brad Genzer, TCEQ Region 14